

**Amendments To the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1           Claim 1 (currently amended): A switching network comprising:  
2               a)           a first stage of switches having input lines and output lines and  
3                           comprising  $m$  ( $n \times k$ ) switches, wherein  $m$  is an integer number,  $n$  is  
4                           an integer number representing the number of input lines and  $k$  is an  
5                           integer number representing the number of output lines;  
6               b)           a second stage of switches comprising of  $m$  ( $k' \times k'$ ) switches,  $k'$  is an  
7                           integer number representing the number of inputs and outputs; and  
8               c)           a third stage of switches comprising of  $m$  ( $k \times n$ ) switches,  
9                           wherein  $k'$  is selected such that  $m \cdot Q(k'/m) \geq k$  (where  $Q(x/y)$  denotes the  
10                           quotient of dividing  $x$  by  $y$ ) to allow using  $m$  switches in the second stage.

1           Claim 2 (currently amended): A switching network comprising:  
2                $m$  identical modules, said module further comprising  
3               a)           an input stage comprising of a ( $n \times k$ ) switch wherein  $n$  is an  
4                           integer number representing the number of input lines and  $k$  is  
5                           an integer number representing the number of output lines;  
6               b)           a middle stage comprising of a ( $k' \times k'$ ) switch,  $k'$  is an integer  
7                           number representing the number of inputs and outputs; and  
8               c)           an output stage comprising of a ( $k \times n$ ) switch  
9                           wherein  $k$ ,  $k'$ , and  $m$  satisfy  $m \cdot Q(k'/m) \geq k$ .

1           Claim 3 (currently amended): A method of constructing a switching network comprising:  
2               a)           using  $m$  identical modules[.];  
3               b)           constructing said module from an input stage comprising of a ( $n \times k$ )  
4                           switch, a middle stage comprising of a ( $k' \times k'$ ) switch, an output stage  
5                           comprising of a ( $k \times n$ ) switch; and  
6               c)           selecting  $k'$  such that  $m \cdot Q(k'/m) \geq k$ .

- 1           Claim 4 (currently amended): A module comprising:
- 2           a)           an input stage comprising of a (n x k) switch wherein n is an integer
- 3                       number representing the number of input lines and k is an integer
- 4                       number representing the number of output lines;
- 5           b)           a middle stage comprising of a (k' x k') switch, k' is an integer
- 6                       number representing the number of inputs and outputs;
- 7           c)           an output stage comprising of a (k x n) switch; and
- 8           wherein a switching network can be constructed using m of said modules, where
- 9           k, k', and m satisfy  $m \cdot Q(k'/m) \geq k$

- 1           Claim 5 (currently amended): A method of constructing a v(k, n, m) switching network
- 2           for values of m belonging to a non-empty set  $\mathcal{M}$  comprising:
- 3           a)           using m identical modules[.];
- 4           b)           constructing said module from an input stage comprising of a (n x k) switch, a
- 5                       middle stage comprising of a (k' x k') switch, an output stage comprising of a (k
- 6                       x n) switch; and
- 7           c)           selecting k' such that  $m \cdot Q(k'/m) \geq k$  for all values of m belonging to set  $\mathcal{M}$ .